

1. *Holascus stellatus*, n. sp. (Pl. XIV. figs. 6-13; Pl. XV. figs. 6-23).

Station 325, east of Buenos Ayres; lat. $36^{\circ} 44'$ S., long. $46^{\circ} 16'$ W.; depth, 2650 fathoms; bottom, blue mud.

At the above locality, the specimen figured in Pl. XV. fig. 6 was dredged, as also the greatly injured fragment of a second specimen represented in Pl. XV. fig. 14. The two specimens differ, moreover, not only in their size, but also in the individual forms of the spicules, so that notwithstanding the general agreement, we have perhaps to deal with two different species.

In the former specimen the almost cylindrical tube, which is slightly widened in the middle (Pl. XV. fig. 6) is 8 cm. long and 13 mm. broad. Upon the upper transversely truncated margin, a terminal circular pad projects somewhat outwards, and this supports transversely the stretched retiform sieve-plate which has been figured by Wyville Thomson (Pl. XV. fig. 6), but which is no longer preserved in the object before me. From their inferior extremity, which is only slightly narrowed, there extends, somewhat to the side, a badly-preserved tuft of fibres about 2 cm. in length. The outer surface of the wall, which is from 1.5 to 2 mm. in thickness, appears to the unaided eye to be roughened by small tubercles, while, with the help of a lens, numerous small pointed elevations showing a uniform distribution and a regular arrangement may be observed in transverse and longitudinal rows. On the inner side pit-like depressions about 1 mm. in breadth likewise occur.

The principalia, which constitute the groundwork of the quadrate lattice-like framework of the tubular wall, are hexacts and pentacts with a distal radial ray. The long longitudinal and transverse rays are so applied to each other that the transverse rays come to lie altogether on the inner side of the longitudinally directed rays. According to the figure given by Wyville Thomson (Pl. XV. fig. 7) it might be thought that the lattice-like network lies close to the inner side of the wall of the tube, and that it consists of nothing but pentacts. Such, however, is not the case. It extends, on the other hand, between the inner and middle third of the thickness of the wall, and consists for the most part of hexacts, between which pentacts with distal radial rays only here and there appear. Numerous thin comitalia, with a variable number of rays, accompany the transverse rays of the principalia. Near the margin of the body, outside the longitudinal strands, long diacts also occur, with pointed upper ends, and with anchor-hooks on their inferior extremities. These diacts are, as a rule, quite smooth above, but bear towards the lower end barbs, which become gradually longer towards the end where the ray passes into a conical pointed thickening, from which usually four, seldom more, anchor-teeth project obliquely outwards and upwards (Pl. XV. fig. 13). Projecting freely downwards for a greater or less distance they form the basal root-tuft.

Among the parenchymalia we must also mention the long, thin, terminally pointed